QUESTIONS & ANSWERS

LEGISLATIVE RESEARCH COMMISSION (LRC)
ENERGY POLICY ISSUES

COMMITTEE MEETING

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Dr. Kenneth B. Taylor, Assistant State Geologist, Division of Land Resources, DENR

Senator Bill Rabon: You were talking about the Deep River Basin and Deep River field at 59,000 acres, what about the Dan River Basin.

Dr. Taylor: The Dan River Basin has got acreage with it too. When we went out to the USGS geological assessment, we were hoping they would use our assessment units as part of the analysis. They decided we would just do the basin complete from the North Carolina line all the way up to Virginia and from Dan River Basin as well as the Dan Mill Basin was just put together into one unit. So they are doing the entire basin, not some sub-element of it. 59,000 would be of low value. It is only part of the basin.

Senator Rabon: So, that is the total in North Carolina.

Dr. Taylor: Just the Sanford sub-basin of just the Deep River Basin.

Sen. Rabon: So, you don't have an estimate.

Dr. Taylor: No sir, I do not.

Senator Rucho—I guess we can assume that we have something there and how much will come sometime in the winter of 2012 as to the amount of resource that might be available in some kind of production effort in shale gas.

Dr. Taylor—Mr. Chairman, the USGS returned a figure of the technical recoverable gas. It is basically under the standard conditions and methodologies of using the gas abstraction method; this is how much could be recovered.

Senator Rucho: A follow-up question to that would be the USGS report would give us a feel of all the basins not just one that Senator Rabon alluded to.

Dr. Taylor: Yes, the USGS is analyzing all the basins along the East Coast from North Carolina all the way up to New Jersey. But, yes, the assessment will be all the Mesozoic Basins.

Senator Blake: As I understand it, there have been two wells dug in this area for different reasons. To get a handle on how much gas, test wells have to be dug. The question is, the two wells that have been dug, are those sites that could be used for checking the volume of gas.

Dr. Taylor: There is one technique that can be used Senator Blake that would be a flow test and that would be basically to open up the well and flare off gas from the wells and see how the pressure diminishes over time. That would give an estimate of what the volume of gas there is on that well. Unfortunately, we don't know how deep away from the well that when they drill the well in they basically shot bullets into the side of the well casing to allow the gas to come in. We have no idea how far into the rock that went. So it might be 50 feet or it might be 500 feet, I don't know.

Senator Blake: If we go forward, I am assuming one day we will have to have test wells dug as part of the process to find out if there is enough natural gas for people to go get it.

Dr. Taylor: These were oil test wells when they were drilled back in 1998, so these are simply two test wells that instead of collecting the data and just cementing the hole, the holes were kept open so we could get additional information from them sometime in the future.

Senator Blake: If we get to the point that we really want to find out, we do have to drill additional wells for the purpose of finding out the volume. Is that correct?

Dr. Taylor: The best gold-standard method of doing it would be to do wire line and send a drill core, just a core sample, go down there, drill out a piece of rock, bring it rapidly to the surface and put into a pressurized container and then have that de-gassed. That would then give us the gold-standard of how much as per cubic foot or cubic inch of shale rock there is in that unit.

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